Work Order ID 109911

December-05-13 2:34:41 PM

(for LG tooling)

109911

Item ID:	D3488-042	Accept			
Revision ID:		10.00 -4 pieces	***N9000401nn***	Setup Start	***NS1***
Item Name:	Blade Fitting RH			Stop	***NS2***

Start Date:	12/05/13	Start Qty: 12.00	***12***	Cust Item ID:	
Required Date:	12/19/13	Req'd Qty: 12.00	***12***	Customer:	

Reference:

				Run Start	***NR1***
Approvals:	Process Plan: MLJ	Date: 13-12-05 Tooling: ___ Date: ___			
	QC: ___	Date: ___ SPC (Y/N): ___ Date: ___		Stop	***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	**Revision Nbr**								
D3488	Rev B								
DSK 101	REV D								
100 ***100*** Doosan Doosan Lathe	DOOSAN LATHE Memo 1-Turn as per Dwg DSK 101 & Folio FA625 2-Deburr	0.00 0.00 13-12-17				10	0		DAS 40 9-89 13/12/16
110 ***110*** QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00 13-1217				10	0		

DQA: _____ Date: _____

QA Closed: _____ Date: _____

DART AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS

	DISPOSITION						
Work Order: _____	Rework ☐	Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Part No. _____	Scrap ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
	Use-as-is ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
NCR No. _____	Suspected Unapproved ☐	Large Fab ☐	Composite ☐	Supplier ☐	☐

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear
- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General
- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function

- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence

- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge

- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____
_____
_____
_____

December-05-13 2:34:41 PM

109911

Item ID:	D3488-042			Accept	***N9000401OO***	Setup	Start	***NS1***
Revision ID:							Stop	***NS2***
Item Name:	Blade Fitting RH							

Start Date:	12/05/13	Start Qty: 12.00	***12***		Cust Item ID:	
Required Date: 12/19/13	Req'd Qty: 12.00	***12***		Customer:	
Reference:						

Run Start ***NR1***

Stop ***NR2***

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 ***120*** HAAS 1 HAAS CNC vertical machine #1	HAAS CNC VERTICAL MACHINING #1 Memo 1-Machine as per Folio FA627 & Dwg D34882-Deburr	0.00 0.00	cnl 13/12/23			10	0		
130 ***130*** QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00	cnl 13/12/23			10 − 4 (for landing gear tooling) ⑥	0		
140 ***140*** QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00	A.a 14/01/08			6	0		(DAS 08 2-89

DQA: _____ Date: _____

QA Closed: _____ Date: _____

 DART AEROSPACE

WORK ORDER NON-CONFORMANCE / UPDATE

Work Order update only ☐

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework	☐
Scrap	☐
Use-as-is	☐
Suspected Unapproved	☐

AGAINST DEPARTMENT/PROCESS

Skid-tube	☐	Crosstube	☐	Water Jet	☐	Engineering	☐
Machining	☐	Small Fab	☐	Prod. Eng. Coor.	☐	Quality	☐
Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐
Large Fab	☐	Composite	☐	Supplier	☐		

Root Cause		Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design	☐									
Doc/Data	☐									
Equip/Tooling	☐									
Handling/Pre	☐									
Material	☐									
Operator	☐									
Offset/Setup	☐									
Process	☐									
Supplier	☐									
Training	☐									
Transport	☐									
Unapproved	☐									

FAULT CATEGORY

Landing Gear

☐	Bending
☐	Centre Not Concentric
☐	Cracks
☐	Crimp/Kink/Ripple/Wave
☐	Cuffs
☐	Crushing
☐	Heat Treat
☐	Inspection Strip in Tube
☐	Marks/Chatter
☐	Turning Sequence
☐	Wave/Twist in Tube

General

☐	Bend
☐	BOM/Route
☐	Broken/Damage/Defect
☐	Burrs
☐	Contamination
☐	Countersink
☐	Cut Too Short
☐	Drawing
☐	Drill Holes
☐	Finish
☐	Fit/Function

☐	Folio/Program
☐	Grain
☐	Hardware
☐	Inspection Incomplete/Unqualified
☐	Instructions Incomplete/Unclear
☐	Misaligned/off center
☐	Mislabeled
☐	Misread
☐	Off-set
☐	Out of Calibration
☐	Out of Sequence

☐	Outside Dimensions
☐	Over/Under tolerance
☐	Part Incorrect
☐	Part Lost/Missing
☐	Part Moved
☐	Positioned Wrong
☐	Power Loss/Surge

☐	Pressure/Forced
☐	Set-up
☐	Temperature/Cure
☐	Weld
☐	Wrong Stock Pulled
☐	Other

_____

_____

_____

Item ID:	D3488-042		Accept	*N9000040100*	Setup	Start	*NS1*
Revision ID:						Stop	*NS2*
Item Name:	Blade Fitting RH						

Start Date:	12/05/13	Start Qty: 12.00	*12*	Cust Item ID:
Required Date:	12/19/13	Req'd Qty: 12.00	*12*	Customer:

Reference:

Approvals:	Process Plan: _____	Date: _____	Tooling: _____	Date: _____	Run	Start	*NR1*
	QC: _____	Date: _____	SPC (Y/N): _____	Date: _____		Stop	*NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
150 *150* HandFinish Hand Finishing	Chemical Conversion Coat per QSI005 4.1 Memo	0.00 0.00				6	7̶6̶	14-1-9	
160 *160* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per QSI005 4.3-Alum M126579 Memo START TIME 9.10 OVEN TEMPERATURE: FINISH TIME: 9.40	0.00 0.00				6	∅	14-1-16.	DAS 34 9-89
170 *170* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				GRM	∅	⅛l	14/02/11

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: _____ Date: _____   Work Order update only ☐

| Work Order: _____ | | | | | | | | | | | | |

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

| Rework ☐ |
| Scrap ☐ |
| Use-as-is ☐ |
| Suspected Unapproved ☐ |

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐	Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐	Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐
Large Fab ☐	Composite ☐	Supplier ☐	

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear

| ☐ Bending |
| ☐ Centre Not Concentric |
| ☐ Cracks |
| ☐ Crimp/Kink/Ripple/Wave |
| ☐ Cuffs |
| ☐ Crushing |
| ☐ Heat Treat |
| ☐ Inspection Strip in Tube |
| ☐ Marks/Chatter |
| ☐ Turning Sequence |
| ☐ Wave/Twist in Tube |

General

| ☐ Bend |
| ☐ BOM/Route |
| ☐ Broken/Damage/Defect |
| ☐ Burrs |
| ☐ Contamination |
| ☐ Countersink |
| ☐ Cut Too Short |
| ☐ Drawing |
| ☐ Drill Holes |
| ☐ Finish |
| ☐ Fit/Function |

| ☐ Folio/Program |
| ☐ Grain |
| ☐ Hardware |
| ☐ Inspection Incomplete/Unqualified |
| ☐ Instructions Incomplete/Unclear |
| ☐ Misaligned/off center |
| ☐ Mislabeled |
| ☐ Misread |
| ☐ Off-set |
| ☐ Out of Calibration |
| ☐ Out of Sequence |

| ☐ Outside Dimensions |
| ☐ Over/Under tolerance |
| ☐ Part Incorrect |
| ☐ Part Lost/Missing |
| ☐ Part Moved |
| ☐ Positioned Wrong |
| ☐ Power Loss/Surge |

| ☐ Pressure/Forced |
| ☐ Set-up |
| ☐ Temperature/Cure |
| ☐ Weld |
| ☐ Wrong Stock Pulled |
| ☐ Other |

_____

_____

_____

Item ID:	D3488-042			Accept	*N9000401 00*	Setup	Start	*NS1*
Revision ID:							Stop	*NS2*
Item Name:	Blade Fitting RH							

Start Date:	12/05/13	Start Qty:	12.00	*12*		Cust Item ID:	
Required Date:	12/19/13	Req'd Qty:	12.00	*12*		Customer:	

Reference:

				Run	Start	*NR1*

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Run Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
180 ***180*** HandFinish Hand Finishing	HandFinishing Memo ⟋ Install Inserts as per Dwg D3488	0.00 0.00				6 RH	1	JM 14/62	1R
190 ***190*** QC Quality Control	QC5- Inspect part completeness to step on W/O Memo	0.00 0.00				6 ∅	14-211		DAS 34 9-89
200 ***200*** Packaging Packaging	Identify as per dwg & Stock Location: F12-001 Memo	0.00 0.00				6 RH	1	JM 14/62	4

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: _____ Date: _____   Work Order update only ☐

Work Order: _____	DISPOSITION		AGAINST DEPARTMENT/PROCESS			

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐   Crosstube ☐   Water Jet ☐   Engineering ☐
Machining ☐   Small Fab ☐   Prod. Eng. Coor. ☐   Quality ☐
Thermoforming ☐   Finishing ☐   Rec/Store/Packaging ☐   Other ☐
Large Fab ☐   Composite ☐   Supplier ☐

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear

☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General

☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

_____
_____
_____
_____

Item ID:	D3488-042		Accept	*N900040100*	Setup	Start	*NS1*
Revision ID:						Stop	*NS2*
Item Name:	Blade Fitting RH						
Start Date:	12/05/13	Start Qty: 12.00	*12*	Cust Item ID:			
Required Date:	12/19/13	Req'd Qty: 12.00	*12*	Customer:			
Reference:					Run	Start	*NR1*

Approvals: Process Plan: _____   Date: _____   Tooling: _____   Date: _____

QC: _____   Date: _____   SPC (Y/N): _____   Date: _____

Run Stop *NR2*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
210	QC21- Final Inspection - Work Order Release	0.00							
210 QC Quality Control	Memo	0.00							_____ 14-02-13

14-02-12

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: _____ Date: _____   Work Order update only ☐

Work Order: _____		
Part No. _____		
NCR No. _____		

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐	Crosstube ☐	Water Jet ☐ Engineering ☐
Machining ☐	Small Fab ☐	Prod. Eng. Coor. ☐ Quality ☐
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐ Other ☐
Large Fab ☐	Composite ☐	Supplier ☐

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear
- ☐ Bending
- ☐ Centre Not Concentric
- ☐ Cracks
- ☐ Crimp/Kink/Ripple/Wave
- ☐ Cuffs
- ☐ Crushing
- ☐ Heat Treat
- ☐ Inspection Strip in Tube
- ☐ Marks/Chatter
- ☐ Turning Sequence
- ☐ Wave/Twist in Tube

General
- ☐ Bend
- ☐ BOM/Route
- ☐ Broken/Damage/Defect
- ☐ Burrs
- ☐ Contamination
- ☐ Countersink
- ☐ Cut Too Short
- ☐ Drawing
- ☐ Drill Holes
- ☐ Finish
- ☐ Fit/Function

- ☐ Folio/Program
- ☐ Grain
- ☐ Hardware
- ☐ Inspection Incomplete/Unqualified
- ☐ Instructions Incomplete/Unclear
- ☐ Misaligned/off center
- ☐ Mislabeled
- ☐ Misread
- ☐ Off-set
- ☐ Out of Calibration
- ☐ Out of Sequence

- ☐ Outside Dimensions
- ☐ Over/Under tolerance
- ☐ Part Incorrect
- ☐ Part Lost/Missing
- ☐ Part Moved
- ☐ Positioned Wrong
- ☐ Power Loss/Surge

- ☐ Pressure/Forced
- ☐ Set-up
- ☐ Temperature/Cure
- ☐ Weld
- ☐ Wrong Stock Pulled
- ☐ Other

_____
_____
_____

Picklist Print

December-05-13 2:34:45 PM

Work Order ID:	109911	*109911*	
Parent Item:	D3488-042	*D3488-042*	
Parent Item Name:	Blade Fitting RH		**Start Date:** 12/05/13 **Required Date:** 12/19/13
			Start Qty: 12.00 **Required Qty:** 12.00

Comments: IPP Rev:A New Issue 06-02-28 JLM
IPP Rev:B As per Rev B 06-03-30 JLM
IPP Rev:C Now On Doosan Lathe JLM   Verified BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
ALS7-1032-225		Purchased	No				Each	92.0000		48/ 24			
ALS7-1032-225 ✗ ALS4-1032-225 Insert									**	AA128174 (x24) JL 11/02/14			

Location		Loc Qty	Loc Code	
FG		80		___
	118520	80		___
ST280		12		___
	122333	12		___

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
D6103-003		Manufactured	No				Each	26.0000		12			
D6103-003 Round Billet, Aluminum									**				

Location		Loc Qty	Loc Code	
MAT043		10		
→7	109281	10		10
MAT047		16		___
	106711	10		___
	95020	4		___
	96416	2		___

13/12/11   DAS 40 9-89

WORK ORDER NON-CONFORMANCE / UPDATE

DART AEROSPACE

QA Closed: _____ Date: _____   Work Order update only ☐

Work Order: _____	DISPOSITION	AGAINST DEPARTMENT/PROCESS

Work Order: _____

Part No. _____

NCR No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐
Suspected Unapproved ☐

AGAINST DEPARTMENT/PROCESS

Skid-tube ☐   Crosstube ☐   Water Jet ☐   Engineering ☐
Machining ☐   Small Fab ☐   Prod. Eng. Coor. ☐   Quality ☐
Thermoforming ☐   Finishing ☐   Rec/Store/Packaging ☐   Other ☐
Large Fab ☐   Composite ☐   Supplier ☐

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design ☐									
Doc/Data ☐									
Equip/Tooling ☐									
Handling/Pre ☐									
Material ☐									
Operator ☐									
Offset/Setup ☐									
Process ☐									
Supplier ☐									
Training ☐									
Transport ☐									
Unapproved ☐									

FAULT CATEGORY

Landing Gear
☐ Bending
☐ Centre Not Concentric
☐ Cracks
☐ Crimp/Kink/Ripple/Wave
☐ Cuffs
☐ Crushing
☐ Heat Treat
☐ Inspection Strip in Tube
☐ Marks/Chatter
☐ Turning Sequence
☐ Wave/Twist in Tube

General
☐ Bend
☐ BOM/Route
☐ Broken/Damage/Defect
☐ Burrs
☐ Contamination
☐ Countersink
☐ Cut Too Short
☐ Drawing
☐ Drill Holes
☐ Finish
☐ Fit/Function

☐ Folio/Program
☐ Grain
☐ Hardware
☐ Inspection Incomplete/Unqualified
☐ Instructions Incomplete/Unclear
☐ Misaligned/off center
☐ Mislabeled
☐ Misread
☐ Off-set
☐ Out of Calibration
☐ Out of Sequence

☐ Outside Dimensions
☐ Over/Under tolerance
☐ Part Incorrect
☐ Part Lost/Missing
☐ Part Moved
☐ Positioned Wrong
☐ Power Loss/Surge

☐ Pressure/Forced
☐ Set-up
☐ Temperature/Cure
☐ Weld
☐ Wrong Stock Pulled

☐ Other

_____
_____
_____

FIRST ARTICLE INSPECTION CHECKLIST

[X] First Article   [ ] Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
			Lathe Section			
Ø2.150	+/-0.005	2.149	/			
Ø2.780	+/-0.005	2.781	/			
Ø3.125	+/-0.010	3.128	/			
Ø3.346	+/-0.010	3.346	/			
0.125 x 45°	+/-0.010 x +/-0.1°	.125 x 45°	/			
8.000	+0.030/-0.000	8.015	/			
9.250	+/-0.010	9.250	/			
0.188	+/-0.010	.189	/			
R0.032	+/-0.010	R.031	/			
R0.062	+/-0.010	R.062	/			
Ø0.297	+0.005/-0.001	.300	/			
Ø0.430	+/-0.010	.431	/			
0.100	+/-0.010	.103	/			
0.125	+/-0.010	.129	/			
2.620	+/-0.010	2.618	/			
3.500	+/-0.010	3.500	/			
1.005	+/-0.010	1.005	/			
Ø0.484	+0.005/-0.001	.485	/			
1.180	+/-0.010	1.180	/			
3.150	+/-0.010	3.150	/			
3.070	+/-0.010	3.070	/			
R0.063	+/-0.010	R.063	/			

13-12-17

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Milling Section						
Ø0.508	+0.006/-0.001	Ø.507	—		Vein	m-06
0.750	+/-0.010	.750	—		"	
1.500	+/-0.010	1.500	—		"	
11.18	+/-0.030	11.177	—		"	
R0.062	+/-0.010	R.062	—		"	
0.125	+/-0.010	.125	—		"	
0.590	+/-0.010	.584	—		"	
0.793	+/-0.010	.794	—		"	
1.351	+/-0.010	1.349	—		"	
1.317	+/-0.010	1.324	—		"	
1.802	+/-0.010	1.802	—		"	

Measured by:		Audited by:	B.A DA 08 2-89	Prototype Approval:	N/A
Date:	13/12/22	Date:	14/01/08	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	06.03.31	New Issue	KJ/JLM	
B	08.09.19	Reformat P/O D3488-042	KJ/JLM	
C	08.12.02	Dimension 8.000 removed	KJ/JLM	

SECTION B-B

49°   41°
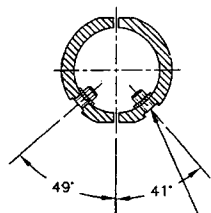
⌀0.297
C'BORE ⌀0.430 x 0.100
INSTALL ALS4-1032-225 (OR AKS4-1032-225
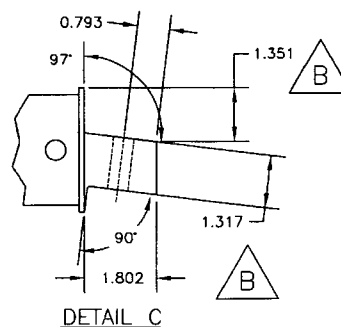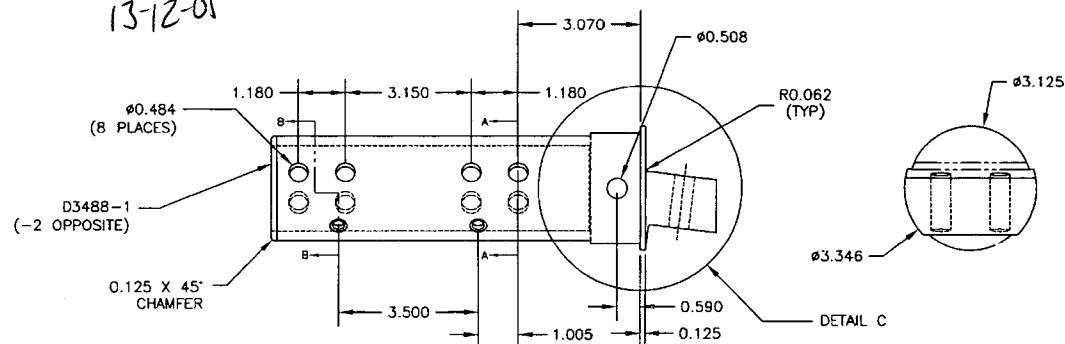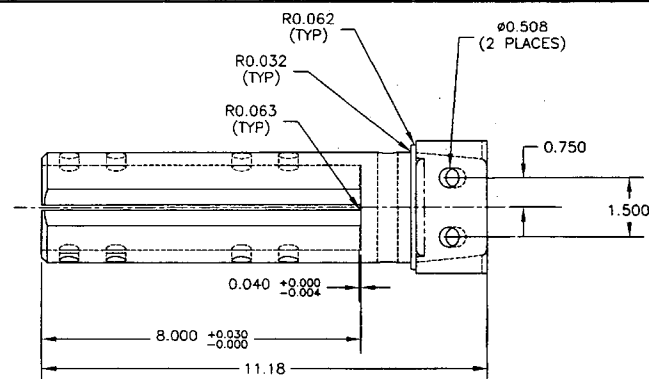OR ALS7-1032-225 OR AKS7-1032-225)
INSERTS AFTER FINISH
(4 PLACES)

4

109911 MLJ
13-12-05

R0.062
(TYP)
R0.032
(TYP)
R0.063
(TYP)
⌀0.508
(2 PLACES)
0.750
1.500
0.040 +0.000/-0.004
8.000 +0.030/-0.000
11.18

⌀2.150 ±0.005   0.125

17°

2.620

⌀2.780 ±0.005

SECTION A-A

3.070
1.180   3.150   1.180
⌀0.484
(8 PLACES)
B   A
⌀0.508
R0.062
(TYP)
D3488-1
(-2 OPPOSITE)
B   A
0.125 X 45°
CHAMFER
3.500
1.005   0.590
0.125
⌀3.125
⌀3.346
DETAIL C

0.793
97°
1.351
B
0.125 X 45°

90°
1.317
1.802
B
DETAIL C

D3488-041 SHOWN (D3488-042 OPPOSITE)

RELEASED
06.03.15 PH
PER DS
ECN #737

D3488-041/-042 BLADE FITTING
1) MATERIAL: MAKE D3488-1/-2 FROM ALUMINUM 7075-T7351 ROUND BAR
                   PER QQ-A-225/9
                   (REF. DART MATERIAL SPEC M7075T73R)
2) FINISH: ACID ETCH, ALODINE PER DART QSI 005 4.1
                   POWDER COAT WHITE (REF 4.3.5.1) PER DART QSI 005 4.3
3) BREAK UNMARKED SHARP EDGES 0.010 TO 0.020
4) INSTALL INSERTS AFTER POWDER COAT
5) ALL DIMENSIONS ARE IN INCHES
6) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

| B | | 06.03.15 | CHANGE THICKNESS |
| A | | 05.12.20 | NEW ISSUE |

DESIGN PH	DRAWN BY PH	DART DART AEROSPACE USA, INC. PORT HADLOCK, WA
CHECKED	APPROVED	DRAWING NO. D3488 REV. B
DATE 06.03.15		TITLE BLADE FITTING SHEET 1 OF 1 SCALE 1:3

109911

![DART]

DESIGN PH	DRAWN BY PH	**DART AEROSPACE USA, INC.**	
		PORT HADLOCK, WA	
CHECKED	APPROVED	DRAWING NO.	REV. D
		DSK 101	SHEET 1 OF 1
DATE		TITLE	SCALE
06.05.09		D3488-1/-2 TURNING DETAIL	1:3

A	05.12.21	NEW ISSUE
B	06.03.02	ADD TOLERANCES AND RADIUS
C	06.04.17	0.188 WAS 0.125
D	06.05.09	REMOVE DIAMETER FOR CHAMFER

α.05.09

0.188 /C\

12.50

9.250

8.000 +0.030/-0.000

0.040 +0.000/-0.004

R0.032

R0.062 /B\

0.125 X 45° CHAMFER

∅2.150±0.005 /B\

∅3.346

∅3.125

∅2.780±0.005 /B\
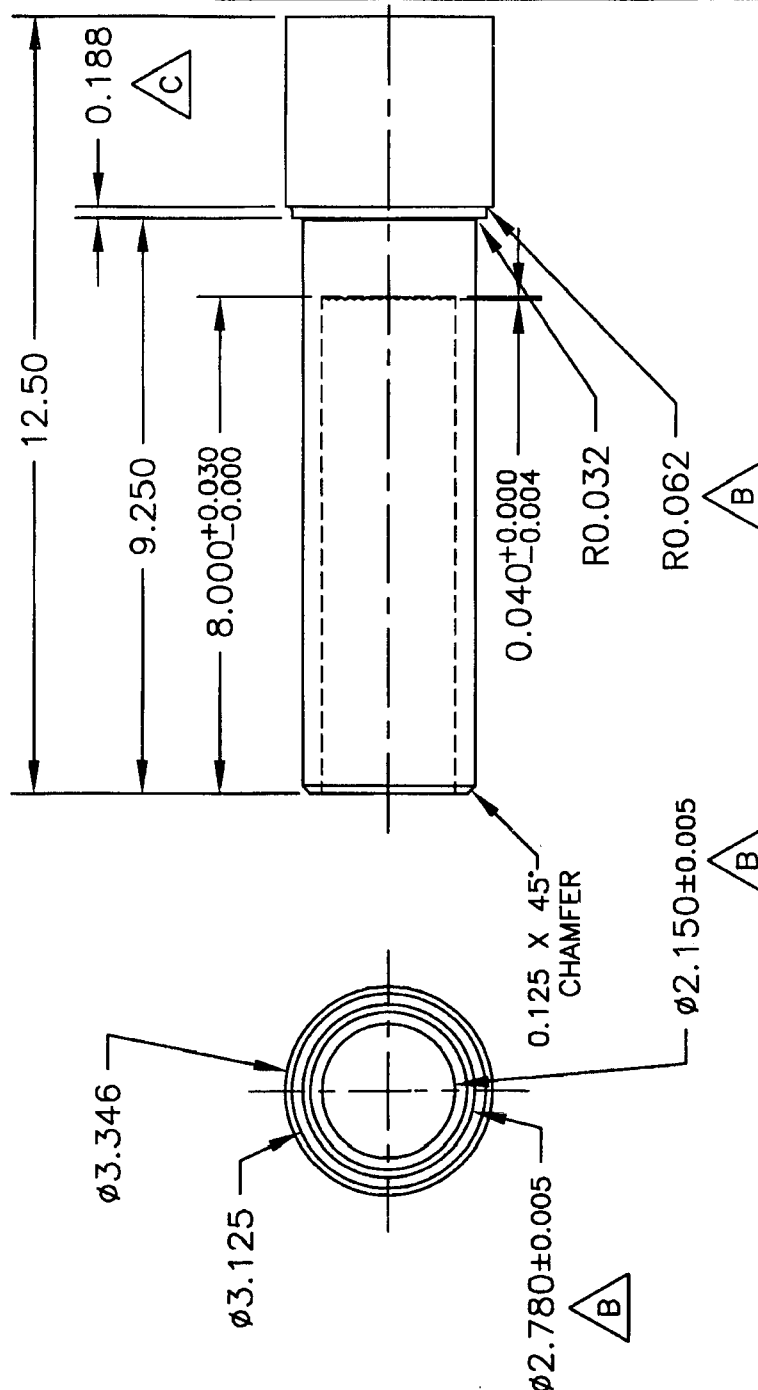
MAKE FROM ALUMINUM 7075-T7351 ROUND BAR PER QQ-A-225/9
(REF. DART MATERIAL SPEC M7075T73R)

DSK 101
1) MATERIAL:

2) FINISH: NONE
3) BREAK UNMARKED SHARP EDGES 0.010 TO 0.020
4) ALL DIMENSIONS ARE IN INCHES
5) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED